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Water Supply Outlook For Idaho



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**SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE**

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES
NOAA, NATIONAL WEATHER SERVICE

AS OF
April 1, 1983

IMPORTANT NOTICE INSIDE

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Fresh powder snow on Elephant Mountain, near the West Fork of Hyalite Creek in Montana.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK

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WATER SUPPLY OUTLOOK FOR IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

PETER C. MEYERS
CHIEF
SOIL CONSERVATION SERVICE
WASHINGTON, D C

=====

Released by

AMOS I. GARRISON, JR.
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

A. KENNETH DUNN
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

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WATER SUPPLY OUTLOOK for IDAHO



GENERAL STATEMENT FOR APRIL 1, 1983

In general, the April 1 snow surveys show Idaho's snowpack to be near normal to well above normal throughout the State except for the Clearwater and Spokane River drainages in northern Idaho which are only 73 percent and 81 percent of average respectively. The remainder of the State ranges from a low of 86 percent of normal on the Cub River drainage in southeastern Idaho to a high of 215 percent of average on the Owyhee River drainage in the southwestern part of the State with most basins in the Snake River drainage ranging from 99 to 154 percent of normal.

The month of March was wet and mild with the State receiving 200 percent of normal precipitation for the month. The range was from 105 percent at Salmon to 457 percent at Ketchum. For the water year, Idaho is now at 132 percent of average. Temperatures were mild, averaging 2°F. to 5°F. above normal for the month.

Soil moisture conditions remain excellent in most of the State with the lower and middle elevation zones being wet or saturated and the higher elevations being damp and unfrozen.

Reservoir carryover storages continue to be near to well above normal in most reservoirs.

The combination of good reservoir carryover storage and near to above normal snowpack conditions assures Idaho's water supplies for this season

to be good to excellent across most of the State. The exceptions are the Clearwater and Spokane River drainages which are forecast to be only 81 and 88 percent of normal respectively. Other forecasts in the State range from 90 percent of average on the Snake near Heise to 194 percent on the inflow to Magic Reservoir.

A potential for high volume flows does exist on several Idaho streams. April and May weather conditions will dictate how much if any flooding will occur. Several areas of concern are the Payette, Big Wood, Little Wood, Big Lost, Bruneau and Owyhee River drainages.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

	Winter March 1983		Fall - Winter Nov. 82 - March 1983	
	Observed	Departure <u>2/</u>	Observed	Departure <u>2/</u>
Kootenai, Canada & U.S.	2.17	+ .43	13.24	- .15
Flathead	1.73	+ 2.20	9.38	- 1.35
Clark Fork	1.26	+ .04	6.81	- 1.19
Pend Oreille-Spokane	3.48	+ .95	18.97	+ 1.42
Upper Snake	2.73	+ 1.21	11.13	+ 1.02
Snake River Plain	1.91	+ 1.13	6.17	+ 1.09
Salmon-Payette-Boise	3.96	+ 2.23	15.33	+ 3.54
Clearwater	3.04	+ .08	14.77	- 3.11
Owyhee-Malheur	2.70	+ 1.85	8.37	+ 2.70

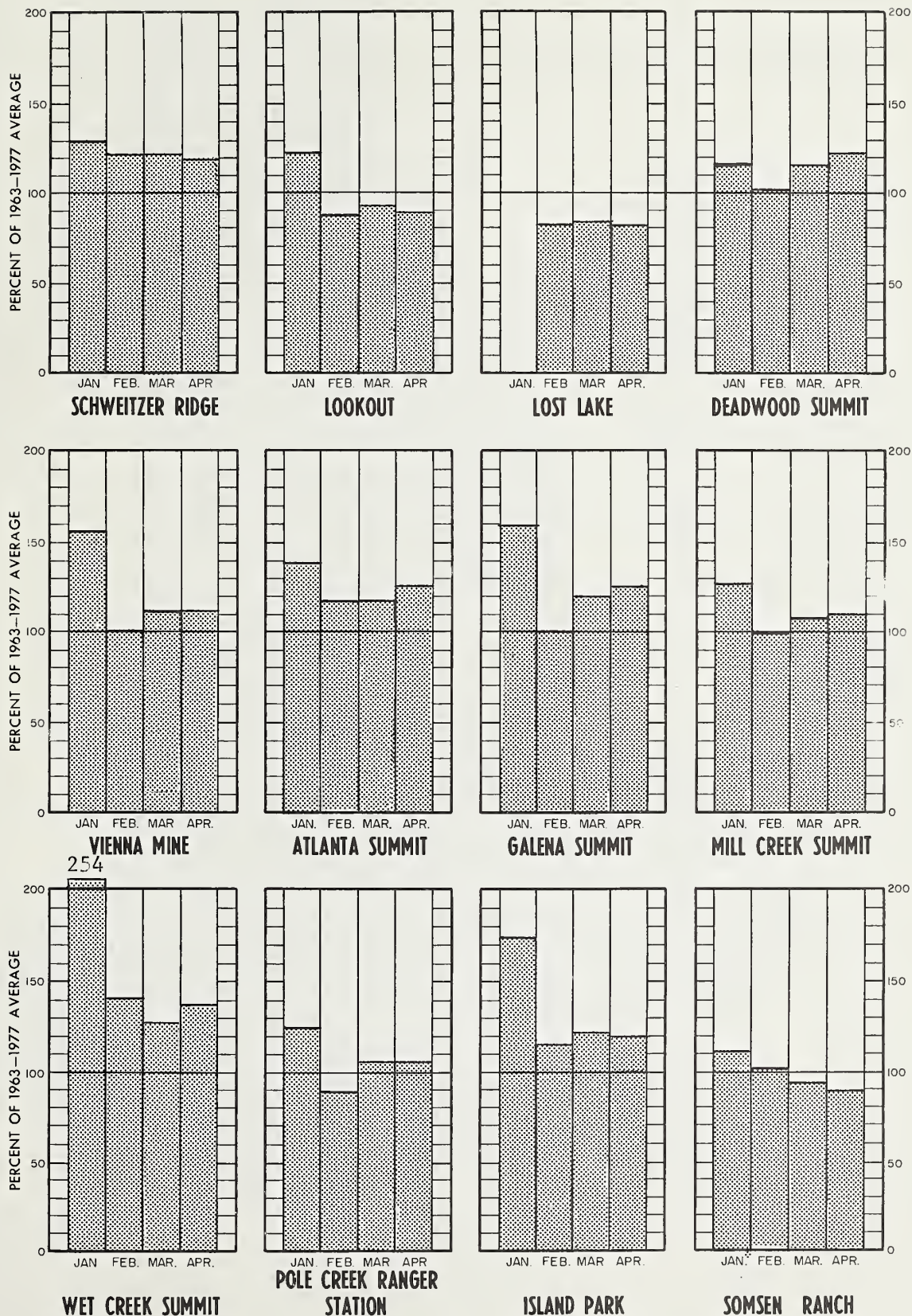
1/ Preliminary analysis and data by the National Weather Service and Meteorological Service of Canada.

2/ Depaarture from 15-year (1963-77) drainage division average.

SNOW WATER DEPTHS ACCUMULATION For Selected Snow Courses

As Compared To 1963 - 1977 15 Year Average

APRIL 1, 1983



COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1963-77 AVERAGE
<u>UPPER COLUMBIA RIVER BASIN</u>			
Kootenai River	38	79	86
Pend Oreille River	136	73	82
Clark Fork River	93	68	79
Flathead River	43	81	85
Priest River	6 - 7	99	109
Spokane River	14 - 16	85	81
Hayden Creek	4	96	--
<u>LOWER SNAKE RIVER BASIN</u>			
Palouse River	3	42	43
Clearwater River	20 - 22	69	73
Salmon River	27 - 32	91	113
Lemhi River	6	76	105
<u>MIDDLE SNAKE RIVER BASIN - Northside</u>			
Little Lost River	5	111	141
Big Lost River	9	117	143
Fish Creek	2	119	181
Little Wood River	4	111	154
Big Wood River	11 - 13	106	142
Boise River	17 - 21	99	132
Canyon Creek	3	107	168
Payette River	14 - 17	103	122
Weiser River	6 - 9	122	131
Mann Creek	4 - 5	127	137
<u>MIDDLE SNAKE RIVER BASIN - Southside</u>			
Raft River	5 - 7	107	150
Goose-Trapper Creek	3 - 5	93	116
Salmon Falls Creek	10 - 11	87	120
Bruneau River	4 - 5	82	124
Owyhee River	7	113	215
Jordan Creek	3	115	163
<u>UPPER SNAKE RIVER BASIN</u>			
Snake Basin - Above Palisades Reservoir	22	69	86
Camas-Beaver Creeks	3	155	155
Henrys Fork River	7 - 11	97	117
Teton River	8 - 9	82	109
Willow Creek	5 - 9	85	106
Blackfoot River	3 - 7	70	88
Portneuf River	4 - 9	69	99
<u>GREAT BASIN</u>			
Bear River - Upper	6	71	86
Bear River - Lower	25	70	106
Montpelier Creek	6	67	92
Mink Creek	7	74	102
Cub River	3 - 4	69	86
Malad River	4 - 7	89	122

SNOW WATER DEPTHS

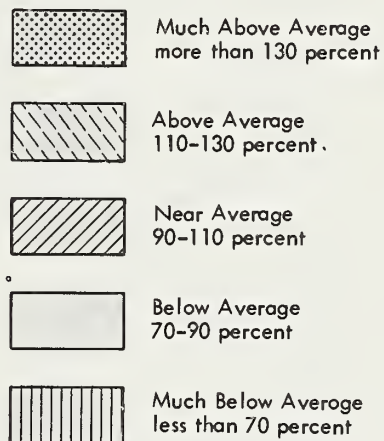
As percent of 1963-77 15 year average

APRIL 1, 1983

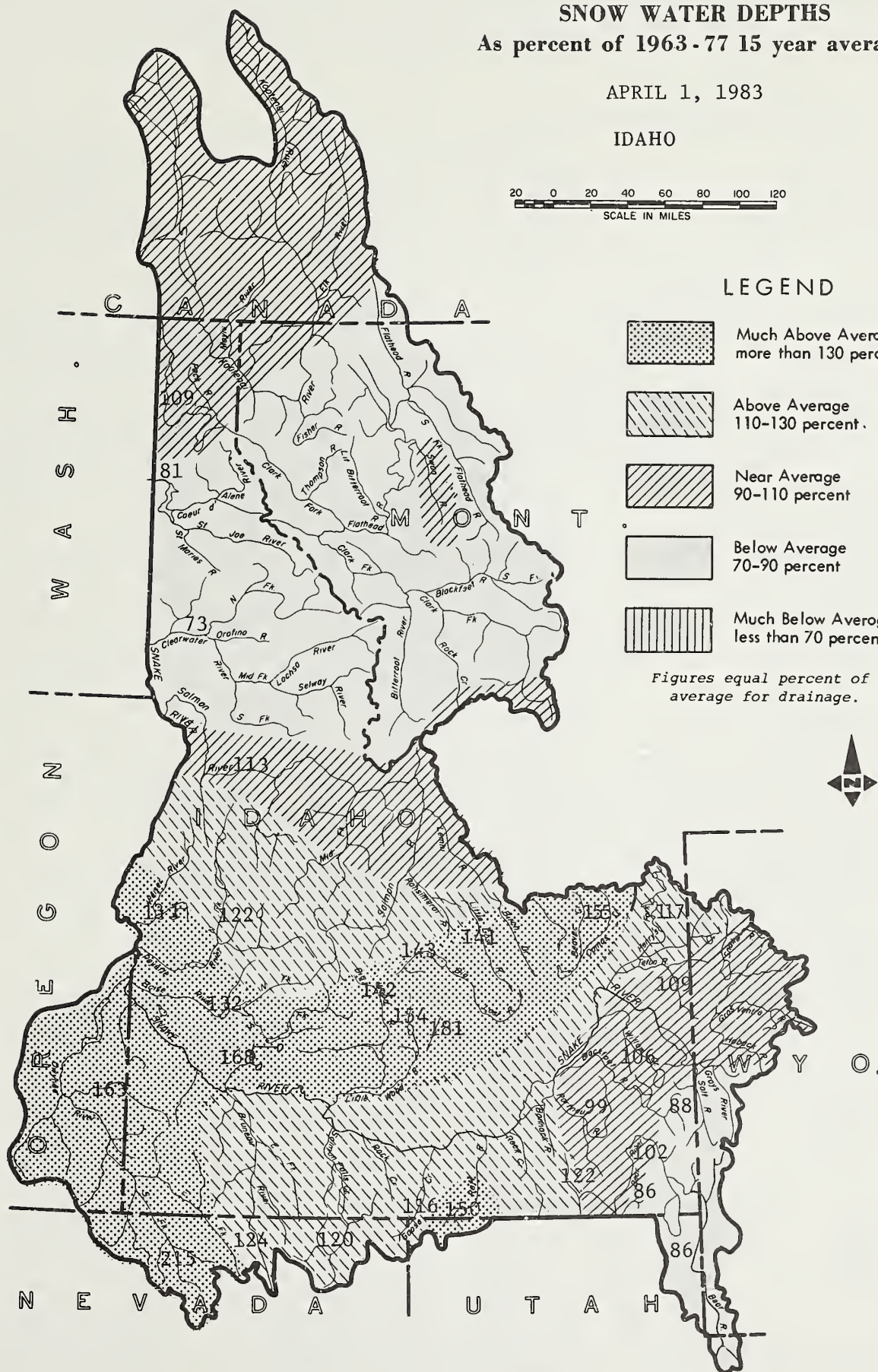
IDAHO

20 0 20 40 60 80 100 120
SCALE IN MILES

LEGEND



Figures equal percent of
average for drainage.



RESERVOIR STORAGE (1,000 Ac. Ft.)

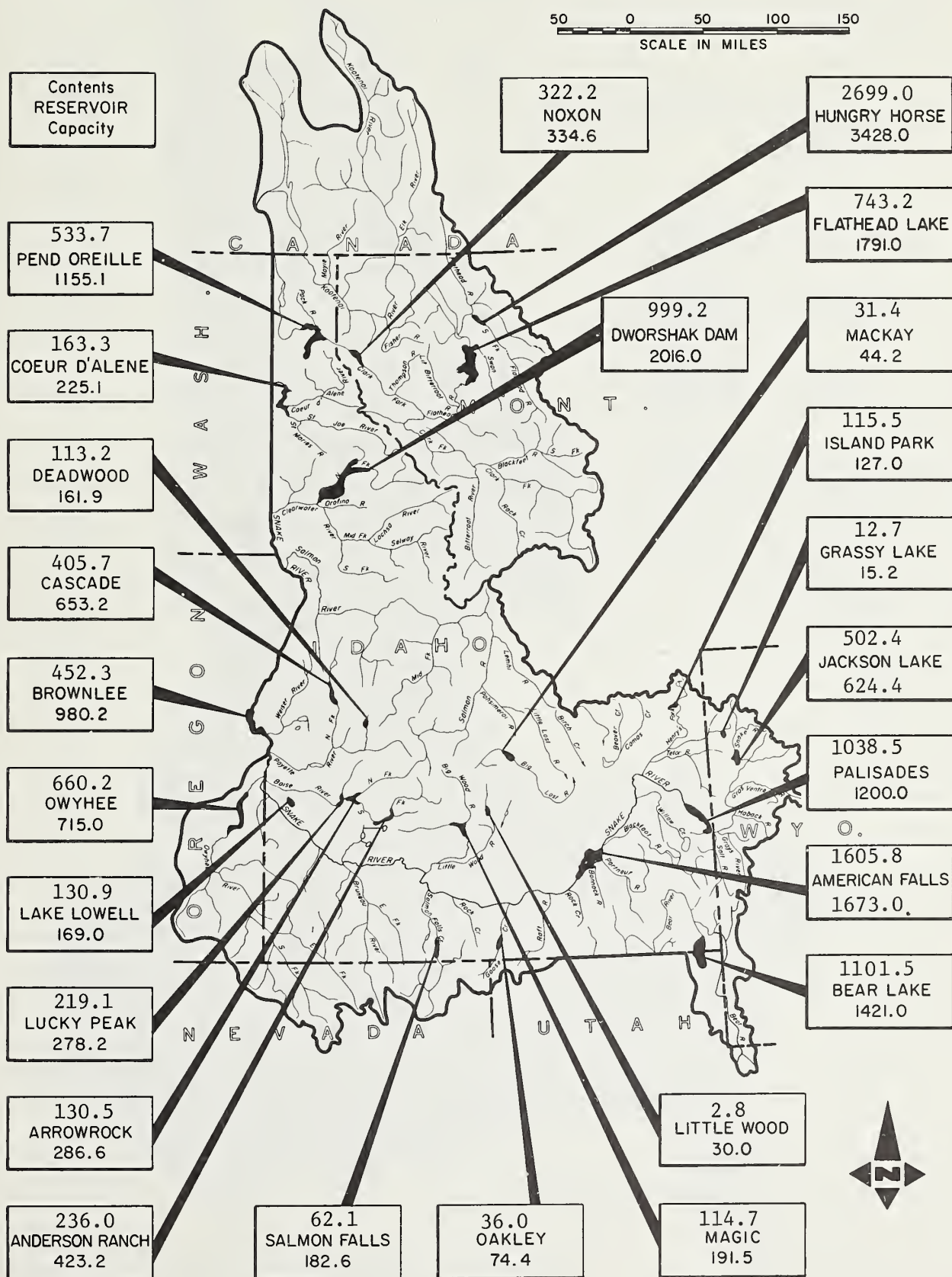
RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2699.0	2158.0	2016.0
Flathead	1791.0	743.2	750.4	775.7
Pend Oreille	1155.1	533.7	549.0	432.9
Noxon	334.0	322.2	312.1	191.9
Spokane				
Coeur d'Alene	225.1	163.3	166.7	149.9
SNAKE BASIN				
Snake				
Jackson Lake	624.4	502.4	459.6	612.9
Palisades	1200.0	1038.5	404.4	815.9
American Falls	1673.0	1605.8	1548.0	1390.8
Island Park	127.0	115.5	123.1	122.5
Grassy Lake	15.2	12.7	13.0	10.8
Brownlee	980.2	452.3	359.0	395.5
Goose-Trapper Creeks				
Oakley	74.4	36.0	31.4	33.1
Salmon Falls Creek				
Salmon Falls	182.6	62.1	33.8	63.7
Big Lost				
Mackay	44.2	31.4	31.2	32.9
Big Wood				
Magic	191.5	114.7	109.3	129.9
Little Wood				
Little Wood	30.0	2.8	18.4	18.5
Fish Creek				
Carey Valley	14.4	10.3	8.4	--
Boise				
Anderson Ranch	423.2	236.0	212.6	248.5
Arrowrock	286.6	130.5	137.1	226.6
Lucky Peak	278.2	219.1	97.2	115.5
Lake Lowell (Deer Flat)	169.0	130.9	128.8	139.3
Owyhee				
Owyhee	715.0	660.2	701.3	553.2
Payette				
Cascade	653.2	405.7	356.9	305.4
Deadwood	161.9	113.2	100.0	92.0
Weiser				
Mann Creek	11.1	6.4	8.8	--
Clearwater				
Dworshak	2016.0	999.2	157.9	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1101.5	957.6	1039.5
*Period of Record.				

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

APRIL 1, 1983

50 0 50 100 150
SCALE IN MILES



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR			PAST RECORD	
		FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
		Thousand Acre Feet	Percent of Average		Last Year	Average [†]
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	8060	91	Apr-Sep	--	8858
		7010	91	Apr-Jul	--	7708
		5600		Apr-Jun	--	6144
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	10700	78	Apr-Sep	--	13781
		9720	78	Apr-Jul	--	12519
		8300	78	Apr-Jun	--	10633
Priest River						
Priest River 1/	(at)	940	105	Apr-Sep	--	895
		883	105	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls 2/	(at)	2570	88	Apr-Sep	--	2910
		2470	88	Apr-Jul	--	2802
St. Joe River						
Calder	(at)	1155	88	Apr-Sep	--	1309
		1095	88	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	857	95	Apr-Sep	--	903
Palisades Inflow 3/		3477	90	Apr-Sep	--	3863
Heise 4/	(nr)	3740	90	Apr-Sep	--	4139
		3175	90	Apr-Jul	--	3527
Blackfoot 5/	(nr)	5160	92	Apr-Sep	--	5612
		4210	92	Apr-Jul	--	4579
Henrys Fork						
Ashton 6/	(nr)	840	114	Apr-Sep	--	737
		624	114	Apr-Jul	--	547
Rexburg 7/	(nr)	1740	113	Apr-Sep	--	1534
		1360	113	Apr-Jul	--	1202
Teton						
South Leigh Creek	(ab)	203	101	Apr-Sep	--	201
		152	101	Apr-Jul	--	150
Portneuf River						
Topaz	(at)	110	102	Mar-Sep	--	108
		90	102	Mar-Jul	--	88
Oakley Reservoir Inflow						
		39	126	Apr-Sep	--	31
		35	125	Apr-Jul	--	28
Salmon Falls Creek						
San Jacinto	(nr)	118	124	Mar-Sep	--	95
		112	124	Mar-Jul	--	90
		105	124	Mar-Jun	--	85
Bruneau River						
Hot Springs	(nr)	325	130	Mar-Sep	--	251
		309	130	Mar-Jul	--	238
Little Lost River						
Howe	(nr)	56	124	Apr-Sep	--	45
		42	124	Apr-Jul	--	34
Wet Creek	(bl)	50.5	123	Apr-Sep	--	41
		40.5	123	Apr-Jul	--	33
		32	123	Apr-Jun	--	26

(c) Assuming normal meteorological conditions.

[†] 1963-1977 period.

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS		THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT		FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
		Thousand Acre Feet	Percent of Average		Last Year	Average [†]
<u>Big Lost River</u>						
Howell Ranch	(at)	305	136	Apr-Sep	--	225
		271	136	Apr-Jul	--	199
		209	136	Apr-Jun	--	154
Mackay 8/	(nr)	278	136	Apr-Sep	--	204
<u>Big Wood River</u>						
Magic Reservoir		620	194	Apr-Sep	--	319
Inflow 9/		590	195	Apr-Jul	--	303
<u>Little Wood River</u>						
Carey 10/	(nr)	186	174	Apr-Sep	--	107
		172	174	Apr-Jul	--	99
		151	174	Apr-Jun	--	87
<u>Boise River</u>						
Twin Springs	(nr)	975	133	Apr-Sep	--	733
		900	133	Apr-Jul	--	676
Boise 11/	(nr)	2219	134	Apr-Sep	--	1656
		2060	134	Apr-Jul	--	1536
		1820	134	Apr-Jun	--	1360
<u>South Fork</u>						
Anderson Dam 12/	(at)	870	140	Apr-Sep	--	622
		815	140	Apr-Jul	--	582
<u>Owyhee River</u>						
Gold Cr., Nv 13/	(nr)	38	165	Apr-Jul	--	23
Owyhee, Nv 13/	(nr)	145	181	Apr-Jul	--	80
Lake Owyhee		775	198	Apr-Sep	--	392
net inflow 14/		750	205	Apr-Jul	--	431
Rome	(at)	740	205	Apr-Jul	--	361
<u>Payette River</u>						
Horseshoe Bend 15/	(nr)	2306	124	Apr-Sep	--	1860
		2134	124	Apr-Jul	--	1721
<u>North Fork</u>						
Cascade 16/	(at)	677	120	Apr-Sep	--	564
		635	120	Apr-Jul	--	529
Banks 16/	(nr)	875	121	Apr-Sep	--	726
		830	121	Apr-Jul	--	687
<u>South Fork</u>						
Lowman	(at)	650	126	Apr-Sep	--	516
		576	126	Apr-Jul	--	458
<u>Weiser River</u>						
Weiser	(nr)	574	130	Apr-Sep	--	442
		537	130	Apr-Jul	--	414
<u>Salmon River</u>						
Whitebird	(at)	9080	126	Apr-Sep	--	7188
		8210	126	Apr-Jul	--	6497
<u>Clearwater River</u>						
Spalding	(at)	7050	81	Apr-Sep	--	8672
		6620	81	Apr-Jul	--	8192
GREAT BASIN						
<u>BEAR RIVER</u>						
Harer	(at)	265	80	Apr-Sep	--	332

(c) Assuming normal meteorological conditions.

* 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average [†]
<u>Montpelier Creek</u> Montpelier (nr)	11.5	83	Apr-Sep	--	13.9
<u>Cub River</u> Preston (nr)	47	95	Apr-Sep	--	50
	44	94	Apr-Jul	--	47

1/ Observed flow corrected for storage in Priest Lake.

2/ Observed flow corrected for storage in Coeur d'Alene Lake.

3/ Corrected for storage in Jackson Lake.

4/ Corrected for storage in Jackson Lake and Palisades.

5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henrys Lake, Grassy Lake and diversions between Heise and Blackfoot.

6/ Corrected for storage in Henrys Lake and Island Park Reservoir.

7/ Corrected for storage in Henrys Lake and Island Park, Grassy Lake and diversions between Ashton and Rexburg.

8/ Observed flow corrected for storage in Mackay Reservoir.

9/ Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine.

10/ Corrected for storage in Little Wood Reservoir.

11/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.

12/ Corrected for storage in Anderson Ranch Reservoir.

13/ Corrected for storage in Wildhorse Reservoir.

14/ From Bureau of Reclamation records of inflow.

15/ Corrected for storage in Cascade and Deadwood Reservoirs.

16/ Corrected for storage in Cascade Reservoir.

Cooperative forecasts released by Soil Conservation Service and National Weather Service.

(c) Assuming normal meteorological conditions.

[†] 1963-1977 period.

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME & DRAINAGE		Elevation				Last Year	Average
Above Burke	Coeur d'Alene	4100	3/31	41	15.4	21.4	24.7*
Above Gilmore	Lemhi	8240	4/1	42	11.5	14.2	10.6
Above Roland	St. Joe	4350	4/1	69	29.8	35.8	35.2*
Allen Ranch	Blackfoot	6470	3/30	26	10.5	13.3	--
Antelope Ridge	Owyhee	6180	3/26	22	7.5	10.4	6.2
Aspen Grove	Willow	6500	4/1	43	14.2	17.4	12.1*
Aspen Hall Pass	Lemhi	8200	4/1	46	11.7	13.8	10.6*
Atlanta Summit	Boise	7600	3/28	126	45.6	50.1	36.2
Atlanta Townsite	Boise	5370	4/1	36	14.2	14.2	--
Austin Brothers Ranch	Blackfoot	6400	3/30	23	8.8	11.2	8.9
Bad Bear	Boise	4940	3/30	38	14.0	15.9	13.9
Badger Gulch	Trapper	6660	4/5	44	14.6	18.2	13.1
Banner Summit	Payette	7040	4/1	102	35.8	38.7	--
Battle Creek	Owyhee	5710	4/5	6	1.2	--	1.7
Beagle Springs (Mt)	Beaverhead	8850	3/31	40	8.6	12.5	--
Bear Basin	Little Salmon	5350	3/31	76	25.8	20.1	--
Bear Canyon	Big Lost	7900	4/1	87	28.2	26.7	19.9
Bear Creek (Nv)	Jarbridge	8040	4/1	83	27.8	31.5	21.3
Bear Mountain	Clark Fork	5400	3/28	147	66.1	75.1	64.2*
Bear Saddle	Mann Creek	6180	3/28	96	37.5	28.8	--
Beaverdam Creek	Portneuf	6120	3/23	25	7.6	12.6	--
Below Roland	St. Joe	3920		Not Available		14.1	16.5*
Bennett Mountain	Canyon Creek	6560	3/26	66	25.2	21.1	17.5
Benton Meadow	Priest	2370	4/1	0	0.0	0.0	5.0
Benton Spring	Priest	4920	4/1	55	22.0	18.9	20.2
Big Creek Summit	Salmon	6580	3/25	118	43.1	51.5	37.5
Big Springs	Henrys Fork	6400	3/30	60	23.2	24.0	22.0
Birch Creek	Willow	6800	4/1	31	9.3	15.9	11.4*
Black Bear (Mt)	Madison	7950	3/30	124	48.4	57.4	44.1
Black Canyon	Henrys Fork	7960	3/31	104	40.6	--	35.4*
Black Moose	Henrys Fork	8160	3/31	113	45.2	--	40.3*
Blue Ledge Mine	Beaver-Camas	6900	3/30	80	31.0	16.7	17.8
Blue Ridge	Blackfoot	6780	4/1	65	24.3	28.0	--
Bogus Basin	Payette	6340	3/30	102	40.0	29.8	24.5
Bogus Basin Road	Boise	5540	3/30	9	2.6	4.9	2.2
Bone	Willow	6200	4/1	21	7.0	7.0	7.2*
Borah (A)	Pahsimeroi	8250	4/1	28	8.4	9.8	--
Bostetter Ranger Sta.	Trapper	7500	4/5	71	21.8	28.1	20.2
Boulder Creek	Weiser	5440	3/31	78	27.8	25.4	25.1
Boy Scout Camp	Raft	7740	4/5	100	31.9	20.7	15.8
Breezy Saddle	Clearwater	5010	3/31	86	24.8	30.4	--
Brockman Station	Willow	6430	4/1	33	10.4	8.3	--
Brundage Mountain	Little Salmon	7560	4/1	152	58.3	57.8	48.6*
Bruno Creek	Squaw Creek	7920	3/29	57	19.4	--	--
Buck Meadows	Selway	5650	3/29	65	20.0	39.5	31.2*
Bull Basin (A)	Owyhee	5460	4/5	T	0.1	--	0.4
Camas Creeks Divide	Big Wood	5710	3/26	49	19.5	17.5	8.8*
Camp Creek	Beaver	6580	3/29	55	17.8	11.5	12.0
Cayuse Airstrip	Clearwater	3500	3/29	7	2.0	8.8	9.8
Cedar Creek	Cedar	6820	4/1	26	8.4	12.6	10.0
Chilco Ridge	Hayden	3650	3/30	0	0.0	0.0	--
Chimney Creek	Big Wood	6400	3/26	57	24.4	18.8	--
Christensen Ranch	Mink	5560	3/27	21	7.4	10.9	7.6
Clear Creek Meadows	Raft	9420	4/5	114	35.8	36.0	23.6
Cliff Canyon	Malad	7200	3/27	63	24.3	14.6	--
Cold Springs	Portneuf	7000	3/27	65	23.4	29.0	--
Conie Ridge	Hayden	3900	3/30	0	0.0	2.0	--
Coolwater Mountain	Lochsa	6030	3/29	100	32.7	44.2	33.0
Copes Camp	Lemhi	7520	4/1	35	8.1	12.6	8.8
Copper Basin	Big Lost	7640	4/1	55	17.9	12.6	10.9
Copper Ridge	Coeur d'Alene	4820	3/31	60	24.7	26.6	29.7
Corner Creek	Hayden	3150	3/30	0	0.0	0.0	--
Couch Summit	Boise	6840	3/26	74	29.4	20.5	18.7
Cozy Cove	Deadwood	5380	4/1	49	19.2	17.5	16.6
Crab Creek	Camas-Beaver	6860	3/30	80	28.8	15.2	--
Crater Meadows	Clearwater	5960	3/29	98	33.4	45.0	46.3
Crawford Ranger Sta.	Payette	4860	3/25	14	5.0	6.5	6.1
Crooked Fork	Lochsa	3610	3/31	18	6.6	13.4	14.1*
Cub River Ranger Sta.	Cub	5450	3/27	17	5.3	10.2	6.9
Daniels Creek	Malad	6270	3/27	22	7.2	9.8	--
Darby Canyon (Wy)	Teton	8250	4/1	72	25.1	32.1	24.0*
Deadline	Salmon Falls	7400	4/1	74	28.5	28.7	22.3
Deadline South	Salmon Falls	7450	4/1	81	31.1	29.5	--

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.

(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
						Last Year	Average
NAME & DRAINAGE		Elevation					
Deadman Gulch	Boise	5600	3/27	63	22.0	20.2	16.8*
Deadwood Airstrip	Deadwood	5360	4/1	53	19.8	18.4	15.6
Deadwood Summit	Deadwood	6860	4/1	148	58.3	61.5	47.5
Dempsey Creek	Portneuf	6100	3/27	34	10.4	18.0	13.0
Dollarhide Summit	Big Wood	8420	4/1	108	37.5	38.9	25.1
Double Springs Pass	Pahsimeroi	8380	4/1	51	14.1	13.2	11.1*
Dry Basin	Mink	7820	3/27	87	30.7	38.5	30.2
Dry Creek Flat	Malad	6360	3/27	18	6.2	9.3	5.3
Dry Fork	Big Lost	7220	3/31	66	21.4	19.7	16.9*
East Creek	Portneuf	7000	3/27	40	13.2	19.0	--
East Twin	Palouse	4130	3/30	0	0.0	11.4	9.8
Elk Butte	Clearwater	5550	3/31	90	27.2	35.4	38.8
Emigrant Summit	Bear	7390	3/31	78	26.1	36.7	26.0
Emigration Canyon	Bear	6500	3/31	29	9.8	16.4	11.1
Fairview Guard Station	Little Lost	6750	3/29	20	6.2	6.6	3.2
Fish Lake Airstrip	Lochsa	5650	3/29	86	29.0	40.8	41.2
Fishpole Lake	Big Lost	9300	4/1	112	40.5	32.1	21.1*
Forty-nine Meadows	Clearwater	4830	3/31	77	24.4	28.6	32.5
Fourth of July Summit	Coeur d'Alene	3200	3/31	0	0.0	3.2	8.8
Fox Creek (Nv)	Jarbridge	6750	4/1	41	13.1	14.7	9.9*
Franklin Basin	Cub	8040	3/27	74	24.6	35.3	28.2
Franklin Basin Snotel	Cub	8170	3/27	81	26.5	--	--
Freds Mountain (Wy)	Teton	8150	3/31	78	28.7	32.3	20.7*
Galena	Big Wood	7440	3/28	73	26.2	23.3	19.5
Galena Snotel	Big Wood	7470	3/28	81	28.2	25.6	--
Galena Summit	Big Wood	8780	3/28	95	31.4	32.3	25.2
Garfield Ranger Sta.	Little Wood	6560	4/1	48	16.1	14.5	10.2
George Creek (Ut)	Raft	8840	4/5	111	35.2	34.5	--
George Peak (Ut)	Raft	9000	4/5	122	39.5	44.0	--
Gibbons Pass (Mt)	Bitterroot	7100	3/28	66	24.8	30.9	24.8
Giveout	Montpelier	6860	4/1	40	11.9	19.0	13.0
Giveout Snotel	Montpelier	6930	4/1	31	9.4	--	--
Goat Creek (Nv)	Salmon Falls	8880	4/1	71	22.0	29.0	18.6
Goat Lake	Clearwater	6500	3/29	104	35.2	47.8	49.3
Graham Guard Station	Boise	5690	4/1	50	18.3	19.8	--
Graham Ranch	Big Wood	6270	3/28	65	23.4	16.6	14.4
Granite Peak	St. Joe	6000	3/31	127	37.8	44.2	46.8
Grassy Lake (Wy)	Henrys Fork	7265	3/29	95	35.1	48.3	36.6
Hall Creek	Lemhi	7560	4/1	22	7.1	8.4	5.9*
Hemlock Butte	Clearwater	5810	3/29	108	38.2	52.2	51.3
Hilts Creek	Little Lost	8000	3/30	59	17.0	--	--
Hoodoo Basin (Mt)	Clark Fork	6000	3/29	109	46.2	65.0	53.6*
Hoodoo Creek (Mt)	Clark Fork	5900	3/29	100	41.4	58.5	49.9
Horseshoe Basin	Bear	8000	3/27	84	29.4	35.7	25.6
Howell Canyon	Marsh Creek	7980	4/5	104	36.6	38.2	26.1
Humboldt Gulch	Coeur d'Alene	4250	3/31	33	11.6	15.0	--
Hummingbird Springs (Nv)	Jarbridge	8870	4/1	91	28.5	37.1	23.7
Hyde Pasture (A)	Jordan-Owyhee	5760	4/5	21	8.0	--	3.2
Hyndman Creek	Big Wood	7440	3/29	63	21.2	22.1	--
Idaho City Townsite	Boise	4000	3/30	0	0.0	3.1	--
Indian Grove	Raft	7560	4/5	62	20.0	15.7	--
Indian Meadows	Teton	8240	4/1	115	45.5	--	37.4*
Iron Bog	Big Lost	7650	3/31	65	20.8	13.2	14.1
Iron Mine Creek	Fish Creek	6300	4/3	52	19.3	15.9	10.5
Irving Creek	Medicine Lodge	7035	3/28	38	10.4	9.5	5.7*
Island Park	Henrys Fork	6290	3/30	58	20.7	20.4	17.2
Jackpine Creek (Wy)	Teton	7350	4/1	70	26.1	29.6	23.0*
Jackson Peak	Boise	7070	4/1	112	40.5	38.8	33.1
Johnson Creek	Blackfoot	6730	3/30	33	11.3	16.8	--
Kellogg Peak	Coeur d'Alene	5560	4/1	82	30.0	36.2	35.4
Kilgore	Camas Creek	6320	3/30	40	15.2	13.2	11.5
Kit Carson Pasture	Selway	4950	3/31	15	4.7	13.1	9.1
Kruze Meadow	Clearwater	4780	3/31	27	8.5	14.6	--
Lake Fork	Payette	5290	3/26	49	16.9	16.6	16.9
Langford Flat Creek	Salmon Falls	5980	4/1	13	4.4	6.2	--
Latham Springs	Henrys Fork	7630	3/30	92	36.4	--	34.8
Lava Creek	Willow	7350	4/1	57	19.3	23.8	--
Leadbelt	Big Lost	6700	3/31	46	14.8	9.2	9.4
Leatherman Pass (A)	Pahsimeroi	9860	4/1	88	30.2	27.4	26.1*
Lemhi Pass (Mt)	Beaverhead	7480	3/29	27	7.8	10.4	9.9
Lemhi Ridge (Mt)	Beaverhead	8100	3/31	37	9.3	12.8	10.9*
Liberty Spring	Mink	8600	3/27	111	40.8	57.6	39.8
Little Beaver	Montpelier	6970	4/1	47	14.9	22.3	16.3

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.

(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
						Last Year	Average
NAME & DRAINAGE		Elevation					
Little Camas Flat	Boise	4940	3/26	15	6.2	8.8	4.0
Logger Springs	Raft	8120	4/5	80	24.8	24.2	--
Lolo Pass	Lochsa	5240	4/2	58	22.0	34.3	32.6
Lookout	Coeur d'Alene	5140	3/31	90	33.0	37.6	37.1
Lost Garfield	Little Lost	6600	3/29	16	5.4	6.7	3.0
Lost Horse	(Mt) Bitterroot	5940	4/1	77	28.8	45.2	35.2
Lost Lake	Clearwater	6110	3/31	152	49.8	57.5	61.8*
Lost-Wood Divide	Big Lost	7900	3/28	86	31.2	33.8	24.8
Lower Elkhorn	Portneuf	6960	3/27	53	18.4	21.8	14.0*
Lower Home Canyon	Montpelier	7640	3/31	41	12.2	19.0	14.9*
Lower Pebble	Portneuf	5780	3/27	42	13.1	20.4	13.3*
Lower Sands Creek	Coeur d'Alene	3120	4/1	39	16.9	16.4	21.9
Lucky Dog	Henry's Fork	6860	3/30	80	31.2	--	26.0
Magic Mountain	Rock Creek	6880	4/1	61	23.1	25.9	19.2
Mann Creek	Weiser	6080	3/28	93	35.4	29.6	27.7*
Mascot Mine	Big Wood	7780	3/29	67	20.6	24.1	15.5
McRenolds Reservoir	Teton	6720	4/1	60	20.5	22.8	20.7*
Meadow Lake	Lemhi	9150	4/1	70	21.8	28.0	20.8
Mill Creek Summit	Salmon	8800	4/1	82	26.5	33.8	24.1
Mink Creek	Portneuf	6410	3/30	58	22.6	29.1	18.3
Montpelier Creek	Montpelier	6540	4/1	22	7.6	9.3	8.4
Moonshine	Little Lost	7440	3/29	52	15.0	12.2	11.2
Moores Creek Summit	Boise	6100	3/30	111	42.4	40.8	33.6
Moose Creek	North Fork Salmon	6200	4/1	54	18.4	22.0	17.1
Morgan Creek	Salmon	7600	4/1	51	15.8	18.9	14.9
Morse Creek Sawmill	Salmon	7120	4/1	38	11.2	11.0	9.5
Moscow Mountain	Palouse	4410	3/30	41	15.9	19.6	18.0
Mosquito Ridge	Coeur d'Alene	5200	4/1	108	42.6	41.8	40.2
Mount Baldy	Big Wood	8920	3/31	109	35.0	25.1	21.4
Mountain Meadows	Selway	6360	3/29	49	14.4	31.6	26.1*
Mud Creek	Willow	7100	4/1	74	25.3	28.5	--
Mud Flat	Owyhee	5730	3/26	18	6.4	8.4	4.9
Muldoon	Little Wood	6320	4/1	31	11.1	9.3	7.1
Nez Perce Pass	(Mt) Bitterroot	6570	3/31	42	13.7	24.1	--
North Putnam	Ross Fork	7240	3/31	91	28.6	41.0	--
One Mile Summit	Raft	7330	4/5	35	7.9	9.2	7.6
Oxford Mountain	Malad	6800	3/27	31	9.0	14.1	9.5
Oxford Spring	Malad	6740	3/27	34	10.9	16.9	--
Packsaddle Spring	Teton	8200	4/1	90	34.2	--	--
Pebble Creek	Portneuf	6550	3/27	45	14.6	20.5	16.7
Perreau Meadows	Salmon	8500	3/30	53	15.5	21.7	--
Phillips Bench	(Wy) Teton	8200	3/29	90	29.6	40.8	30.6*
Pierce Ranger Station	Clearwater	3080	3/30	0	0.0	11.5	10.6
Pine Creek Pass	Teton	6810	3/31	51	17.4	23.2	18.3
Placer Creek	Weiser	5860	3/27	68	23.2	18.8	18.8
Pole Creek Ranger Sta.	Jarbridge	8360	4/1	72	23.6	30.6	22.5
Prairie	Boise	4800	3/31	0	0.0	4.6	3.4
Red Canyon	Owyhee	6650	4/5	27	10.3	--	5.0
Redfish Lake Flat	Salmon	6560	3/28	44	15.9	15.6	10.9*
Road Creek	Boise	5380	4/1	24	8.4	13.0	9.2*
Robinson Creek Ridge	Weiser	6220	3/28	79	32.5	19.0	21.3*
Rock Flat Summit	Payette	5310	3/31	69	25.3	18.4	19.6
Roland Summit	St. Joe	5120	4/1	98	39.0	46.4	40.1*
Sage Creek Saddle	Hayden	4080	3/30	40	15.8	16.2	--
Savage Pass	Lochsa	6170	3/31	66	23.0	34.3	28.6
Sawmill Canyon	Little Lost	7000	3/29	31	10.0	8.8	8.1
Sawtell Mountain	Henry's Fork	8720	3/30	137	51.0	48.8	35.1*
Schwartz Lake	Lemhi	8540	4/1	50	13.9	20.3	13.8
Schweitzer Basin	Pend Oreille	6090	3/31	147	60.1	61.0	--
Schweitzer Bowl	Pend Oreille	4800	3/31	97	40.1	38.6	30.9*
Schweitzer Ridge	Pend Oreille	6200	3/31	137	57.1	54.5	47.8*
Secesh Summit	Payette	6520	3/26	107	43.6	46.8	37.2*
Sedgwick Peak	Portneuf	7850	3/27	58	16.8	26.3	--
Seventy-Six Creek	Jarbridge-Bruneau	7100	4/1	52	17.4	--	11.4
Shanghai Summit	Clearwater	4570	3/29	54	18.2	27.2	27.2
Sheep Mountain	Willow	6570	4/1	47	16.4	18.3	13.9*
Sherwin	St. Maries	3200	3/28	10	3.6	15.1	13.8
Shoshone Basin	Salmon Falls	5810	4/1	14	4.4	5.0	5.1*
Silver City	Jordan-Owyhee	6400	3/26	56	21.5	19.8	15.4
Skitwish Ridge	Coeur d'Alene	5110	3/31	87	35.5	33.9	--
Slug Creek Divide	Blackfoot	7230	3/31	48	14.7	22.3	18.0
Smith Creek	Kootenai	4800	3/30	122	51.8	52.8	48.8
Soldier Ranger Station	Big Wood	5740	3/26	44	18.5	11.9	10.3

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SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME & DRAINAGE		Elevation				Last Year	Average
Somsen Ranch	Willow Creek	6840	3/30	40	13.5	20.6	15.1
South Mountain	Jordan-Owyhee	6500	4/2	70	26.5	19.0	13.0
Squaw Flat	Weiser	6240	3/26	84	33.4	26.8	--
Squaw Meadow	Payette	5900	3/26	98	44.7	45.3	37.4
State Line	Teton	6660	3/31	44	15.5	17.4	15.3
Stickney Mill	Big Lost	7430	3/28	52	16.5	13.7	10.6
Strawberry Creek	Mink	5820	3/31	25	9.2	12.7	10.2
Strawberry Mink Divide	Mink	6720	3/27	56	20.5	28.8	21.9
Sturgill Ridge	Weiser	6680	3/28	110	44.4	34.4	32.6*
Sublett	Raft	5950	4/5	43	14.5	16.3	11.1
Succor Creek	Jordan-Owyhee	6100	4/5	41	15.6	--	5.0
Sulphur Peak	Blackfoot	7070	3/30	40	14.6	19.9	--
Sunset	Coeur d'Alene	5540	4/1	79	28.4	37.0	36.2
Swede Peak	Little Wood	7640	4/1	86	29.7	26.0	18.1
Targhee Pass	Henrys Fork	6980	3/30	60	20.1	16.8	17.1*
Telfer Ranch	Fish Creek	5840	4/3	29	12.0	10.3	6.8
Teton Pass W.S. (Wy)	Teton	7740	3/29	83	29.0	34.7	27.7*
Tex Creek	Willow	6650	4/1	32	10.6	13.6	9.7*
Thorson Cabin	Weiser	5320	3/28	54	19.3	21.0	14.3*
Trail Creek (Mt)	Beaverhead	7090	3/31	24	6.6	--	--
Trinity Mountain	Boise	7770	3/28	137	52.6	60.8	43.2
Tripod Summit	Payette	5260	3/27	58	22.4	20.9	19.7
Twelve Mile Creek (Mt)	Bitterroot	5600	4/1	43	16.7	--	--
Twin Peaks	Salmon	9190	4/1	85	27.5	35.1	28.0
Twin Lakes (Mt)	Bitterroot	6510	4/1	95	36.3	--	--
Twitchell Canyon	Blackfoot	6300	3/31	53	19.7	--	--
Upper Elkhorn	Portneuf	7140	3/27	76	25.5	27.1	19.5*
Upper Home Canyon	Montpelier	8560	3/31	73	23.5	35.2	25.1*
Valley View	Henrys Fork	6680	3/30	63	21.9	19.8	18.4
Vaught Ranch	Owyhee	5830	4/5	0	0.0	--	1.7*
Vi Pont	Goose	7670	4/5	63	19.8	22.0	15.1*
Vienna Mine	Salmon	8960	3/28	118	43.2	55.6	38.7*
War Eagle	Jordan-Owyhee	7280	4/5	102	40.8	--	25.1
Webb Creek	Clearwater	4720	3/31	27	8.9	14.4	--
Webber Creek	Medicine Lodge	6700	3/28	34	9.8	9.8	--
West Branch	Weiser	5560	3/31	87	31.2	29.8	--
West Twin	Palouse	4220	3/30	0	0.0	6.1	9.1
Wet Creek Summit	Little Lost	7680	3/30	64	18.7	15.3	13.6
Whiskey Flat	Montpelier	6960	4/1	30	9.8	15.3	9.4
White Elephant	Henrys Fork	7710	3/30	101	35.1	34.4	25.6*
Wildhorse Divide	Portneuf	6490	3/30	53	19.8	25.8	--
Williams Creek Summit	Salmon	7990	3/30	41	10.7	16.7	13.5
Willow Flat	Cub	6070	3/27	38	12.9	19.3	14.8
Wilson Creek (Nv)	Salmon Falls	7500	4/1	53	18.7	19.7	11.9
Wood Canyon Divide	Blackfoot	7450	3/30	50	17.0	24.8	--
Worm Creek	Cub	6620	3/27	48	17.5	23.0	--

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.

(A) Aerial observation Water content estimated.

SNOTEL 1/

Data Site Name	Drainage	Date	Pillow Snow Water Equivalent (inches)	Precipitation Water Year (Accumulative) (inches)
Atlanta Summit	Boise	4/1	Not Available	46.7
Banner Summit	Payette	4/1	33.9	36.2
Bear Basin	Little Salmon	4/1	28.2	34.3
Bear Canyon	Big Lost	4/1	27.0	30.2
Bear Mountain	Clark Fork	4/1	Not Available	74.6
Bear Saddle	Mann Creek	4/1	39.2	38.8
Bennett Mountain	Canyon Creek	4/1	31.3	30.3
Big Creek Summit	Salmon	4/1	45.4	43.7
Bostetter Ranger Station	Trapper	4/1	33.5	15.7
Cozy Cove	Deadwood	4/1	26.3	32.7
Crab Creek	Camas-Beaver	3/30	30.3	28.4
Deadwood Summit	Deadwood	4/1	68.1	52.0
Dollarhide Summit	Big Wood	4/1	38.7	37.6
Elk Butte	Clearwater	4/1	42.2	45.8
Emigrant Summit	Bear	4/1	31.7	28.3
Franklin Basin	Cub	4/1	30.2	29.0
Galena	Big Wood	4/1	27.2	26.3
Galena Summit	Big Wood	4/1	28.0	30.7
Garfield Ranger Station	Little Wood	4/1	21.3	22.4
Giveout	Montpelier	4/1	12.2	11.2
Graham Guard Station	Boise	4/2	24.0	30.9
Hilts Creek	Little Lost	4/1	22.2	20.9
Howell Canyon	Marsh Creek	4/1	31.5	32.9
Humboldt Gulch	Coeur d'Alene	4/1	10.1	38.8
Hyndman	Big Wood	4/1	22.5	24.3
Island Park	Henrys Fork	4/1	21.0	24.8
Jackson Peak	Boise	4/1	40.9	44.0
Lolo Pass	Lochsa	4/1	18.1	32.1
Lookout	Coeur d'Alene	4/1	32.4	41.0
Lost Lake	Clearwater	4/1	62.5	58.3
Lost-Wood Divide	Big Lost	4/1	34.6	34.8
Magic Mountain	Rock Creek	4/1	24.7	25.8
Meadow Lake	Lemhi	3/31	23.0	21.0
Mill Creek Summit	Salmon	4/1	23.1	24.4
Moonshine	Little Lost	4/1	16.6	17.5
Moore Creek Summit	Boise	4/1	48.9	45.2
Moose Creek	North Fork Salmon	4/1	19.9	21.4
Morgan Creek	Salmon	4/1	17.1	17.9
Mosquito Ridge	Coeur d'Alene	4/1	43.9	48.2
Mountain Meadows	Selway	4/1	19.2	23.9
Mud Flat	Owyhee	4/1	7.5	14.4
Oxford Spring	Malad	4/1	12.7	20.3
Prairie	Boise	4/1	0.0	24.2
Savage Pass	Lochsa	4/1	23.6	27.0
Schweitzer Basin	Pend Oreille	4/1	68.0	47.1
Secesh Summit	Payette	4/1	48.7	45.6
Shanghai Summit	Clearwater	4/1	24.2	37.5
Sheep Mountain	Willow	4/1	Not Available	19.1
Sherwin	St. Maries	4/1	4.7	30.0
Slug Creek Divide	Blackfoot	4/1	18.9	20.2
Somsen Ranch	Willow Creek	3/30	12.8	15.6
South Mountain	Jordan-Owyhee	4/1	34.6	31.0
Squaw Flat	Weiser	4/1	37.0	41.4
Stickney Mill	Big Lost	4/1	15.4	16.0
Sunset	Coeur d'Alene	4/1	35.3	35.9
Swede Peak	Little Wood	4/1	28.6	31.5
Trinity Mountain	Boise	4/1	54.7	55.9
Vienna Mine	Salmon	4/1	46.9	43.0
West Branch	Weiser	3/27	30.4	37.9
White Elephant	Henrys Fork	4/1	37.3	39.8
Wildhorse Divide	Portneuf	4/1	13.5	26.4

1/Data readings as reported by automated Snotel System.

C A N A D A



INDEX to SNOW COURSES

UPPER COLUMBIA BASIN

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
KOOTENAI RIVER						
16A1	I	Smith Creek	29	64N	3W	4800
PEND OREILLE-PRIEST RIVER						
16A8S	I	Bear Mountain	9	57N	3E	5400
16A2	I	Benton Meadow	27	58N	4W	2370
16A3	I	Benton Spring	30	58N	3W	4920
16A10S	I	Schweitzer Basin	18	58N	2W	6090
16A6	I	Schweitzer Bowl	20	58N	2W	4800
16A5	I	Schweitzer Ridge	19	58N	2W	6200
HAYDEN CREEK						
16B8	I	Chilco Ridge	15	52N	2W	3650
16B7	I	Conie Ridge	22	52N	2W	3900
16B9	I	Corner Creek	22	52N	2W	3150
16B6	I	Sage Creek Sadler	10	52N	2W	4080
SPOKANE RIVER						
15B8	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	35	47N	6E	3920
16B2	I	Copper Ridge	6	50N	1W	4820
16B3	I	Fourth of July Summit	6	49N	1W	3200
15B13A	I	Granite Peak	4	42N	8E	6000
15B21S	I	Humboldt Gulch	2	48N	5E	4250
16B5A	I	Kellog Peak	19	48N	3E	5560
15B2S	I	Lookout	4	47N	6E	5140
16B1	I	Lower Sands Creek	32	51N	1W	3120
16A4AS	I	Mosquito Ridge	5	54N	2E	5200
15B5A	I	Roland Summit	26	47N	6E	5120
16C1S	I	Sherwin	28	42N	1E	3200
16B4	I	Skitwish Ridge	6	50N	1W	4850
15B9AS	I	Sunset	33	49N	5E	5540

LOWER SNAKE BASIN

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
PALOUSE RIVER						
16C3	I	East Twin	13	40N	5W	4130
16C2	I	Moscow Mountain	18	40N	4W	4410
16C4	I	West Twin	14	40N	5W	4220
CLEARWATER RIVER						
15B20	I	Breezy Saddle	1	43N	4E	5010
15D5	I	Buck Meadows	27	31N	8E	5650
15C3	I	Cayuse Airstrip	4	38N	11E	3500
15C7	I	Coolwater Mountain	31	33N	8E	6040
15C9A	I	Crater Meadows	11	37N	9E	5960
14C11	I	Crooked Fork	27	37N	14E	3610
16C15	I	Elk Butte	6	40N	3E	5550
15C2A	I	Fish Lake Airstrip	34	35N	11E	5650
15B3A	I	Forty-nine Meadows	6	43N	5E	4830
14C9A	I	Goat Lake	3	38N	13E	6500
16C6SR	I	Hemlock Butte	7	36N	7E	5810
15C10S	M	Hoodoo Basin	17	14N	27W	6000
15C1	M	Hoodoo Creek	16	14N	27W	5900
14D3	I	Kit Carson Pasture	4	27N	15E	4950
16C17	I	Kruze Meadows	11	32N	4W	4780
14C5S	I	Lolo Pass	16	38N	15E	5240
15B14S	I	Lost Lake	9	43N	4E	6110
15D6S	I	Mountain Meadows	9	27N	10E	6360
14D1	M	Nez Perce Pass	25	1S	24W	6570
15CS	I	Pierce Ranger Station	2	36N	5E	3080
14C4S	I	Savage Pass	18	36N	15E	6170
15C4S	I	Shanghai Summit	7	37N	6E	4600
16C18	I	Soldier Meadows	33	33N	3W	4650
SALMON RIVER						
13E19	I	Above Gilmore	13	13N	26E	8240
13E21A	I	Aspen-Hall Pass	6	16N	28E	8200
16E11S	I	Bear Basin	30	19N	3E	5350
15E2S	I	Big Creek Summit	24	15N	5E	6580
13E8A	I	Borah	21	10N	23E	8250
16D6	I	Brundage Mountain	6	19N	3E	7560
13E17	I	Copes Camp	36	18N	22E	7520
13E25A	I	Double Springs Pass	3	10N	22E	8400
13D2	M	Gibbons Pass	4	2S	19W	7100
13E20	I	Hall Creek	1	16N	27E	7560
13E24A	I	Leatherman Pass	20	9N	23E	9860
13E1	M	Lemhi Pass	9	10S	15W	7480
13E23S	M	Lemhi Ridge	4	10S	15W	8100
13E18S	I	Meadow Lake	26	13N	26E	9150
14E1S	I	Mill Creek Summit	8	13N	17E	8800
13D16S	I	Moose Creek	14	27N	21E	6200
14E4S	I	Morgan Creek	31	18N	19E	7600
13E26	I	Morse Creek Sawmill	8	15N	23E	7120
14D5	I	Perreau Meadows	23	21N	20E	8500
14E7	I	Redfish Lake Flat	35	10N	13E	6560
13E16	I	Schwartz Lake	34	18N	22E	8540
14E3A	I	Twin Peaks	28	15N	17E	9190
14F4S	I	Vienna Mine	1	5N	13E	8960
14D4	I	Williams Creek Summit	34	21N	20E	7990

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

MIDDLE SNAKE RIVER BASIN NORTHSIDE



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- ⚡ Snow Course and Automated Site
- † Aerial Snow Depth Gage

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN NORTHSIDE

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
LITTLE LOST RIVER						
13E5	I	Fairview Guard Station	27	12N	26E	6750
13E10S	I	Hilts Creek	15	8N	25E	8000
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6S	I	Moonshine	31	13N	26E	7440
13E4	I	Sawmill Canyon	17	12N	26E	7000
13E7	I	Wet Creek Summit	15	8N	25E	7680

BIG LOST RIVER						
13F3S	I	Bear Canyon	22	5N	21E	7900
13F2	I	Copper Basin	26	6N	21E	7640
13F20	I	Dry Fork	23	3N	23E	7220
13F8	I	Fishpole Lake	28	4N	22E	9300
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6700
14F3S	I	Lost Wood Divide	25	6N	18E	7900
14F2S	I	Stickney Mill	9	6N	19E	7430

BIG WOOD RIVER						
15F9	I	Camas Creeks Divide	11	2S	9E	5710
15F15	I	Chimney Creek	9	1N	12E	6400
14F8S	I	Dollarhide Summit	9	3N	15E	8420
14F1	I	Galena	4	6N	15E	7440
14F6S	I	Galena Snotel	4	6N	15E	7470
14F12S	I	Galena Summit	7	6N	15E	8780
14F5	I	Graham Ranch	10	5N	17E	6270
14F16S	I	Hyndman Creek	2	4N	19E	7440
14F7	I	Mascot Mine	8	4N	20E	7780
14F9	I	Mount Baldy	23	4N	17E	8920
14F11	I	Soldier Ranger Station	29	2N	14E	5740

LITTLE WOOD RIVER						
13F4S	I	Garfield Ranger Station	11	3N	21E	6560
13F5	I	Muldoon	26	3N	21E	6320
13F9S	I	Swede Peak	4	3N	21E	7640

FISH CREEK						
13F10	I	Iron Mine Creek	33	3N	23E	6300
13F6	I	Telfer Ranch	7	2N	23E	5840

BOISE RIVER						
15F8	I	Atlanta Townsite	3	5N	11E	5370
15F4S	I	Atlanta Summit	23	5N	10E	7580
15F2	I	Bad Bear	35	7N	6E	4940
16F4	I	Bogus Basin Road	32	5N	3E	5540

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
BOISE RIVER (cont.)						
14F10	I	Couch Summit	9	2N	14E	6840
16F1	I	Deadman Gulch	29	7N	4E	5600
15F14S	I	Graham Guard Station	9	7N	10E	5690
15F10	I	Idaho City Townsite	26	6N	5E	4000
15E9S	I	Jackson Peak	7	8N	9E	7070
15F1S	I	Moore's Creek Summit	19	7N	7E	6100
15F6S	I	Prairie	13	2N	7E	4800
15F3	I	Road Creek	5	5N	8E	5380
15F5S	I	Trinity Mountain	6	3N	9E	7770

CANYON CREEK						
15F7S	I	Bennett Mountain	7	2S	9E	6560
15F12	I	Little Camas Flat	21	1S	9E	4940

PAYETTE RIVER						
15E11S	I	Banner Summit	11	11N	10E	7040
16F2	I	Bogus Basin	16	5N	3E	6340
15E8S	I	Cozy Cove	17	11N	7E	5380
15E3	I	Crawford Ranger Station	21	14N	4E	4860
15E10	I	Deadwood Airstrip	8	11N	7E	5360
15E4S	I	Deadwood Summit	13	14N	7E	6860
15E1	I	Lake Fork	3	18N	4E	5290
16E1	I	Rock Flat Summit	1	18N	2E	5310
15D1S	I	Secesh Summit	4	21N	4E	6520
15D2	I	Squaw Meadow	17	21N	4E	5900
16E3	I	Tripod Summit	17	11N	3E	5260

WEISER RIVER						
16D1	I	Boulder Creek	16	20N	1W	5440
16E2	I	Placer Creek	15	17N	3W	5860
16E5S	I	Squaw Flat	32	17N	2E	6240
16D8S	I	West Branch	15	20N	1W	5560

MANN CREEK						
6E10S	I	Bear Saddle	29	15N	5W	6180
16E9	I	Mann Creek	20	15N	5W	6080
17E1	I	Robinson Creek Ridge	2	14N	6W	6220
16E8	I	Sturgill Ridge	28	15N	5W	6680
17E2	I	Thorson Cabin	12	14N	6W	5320

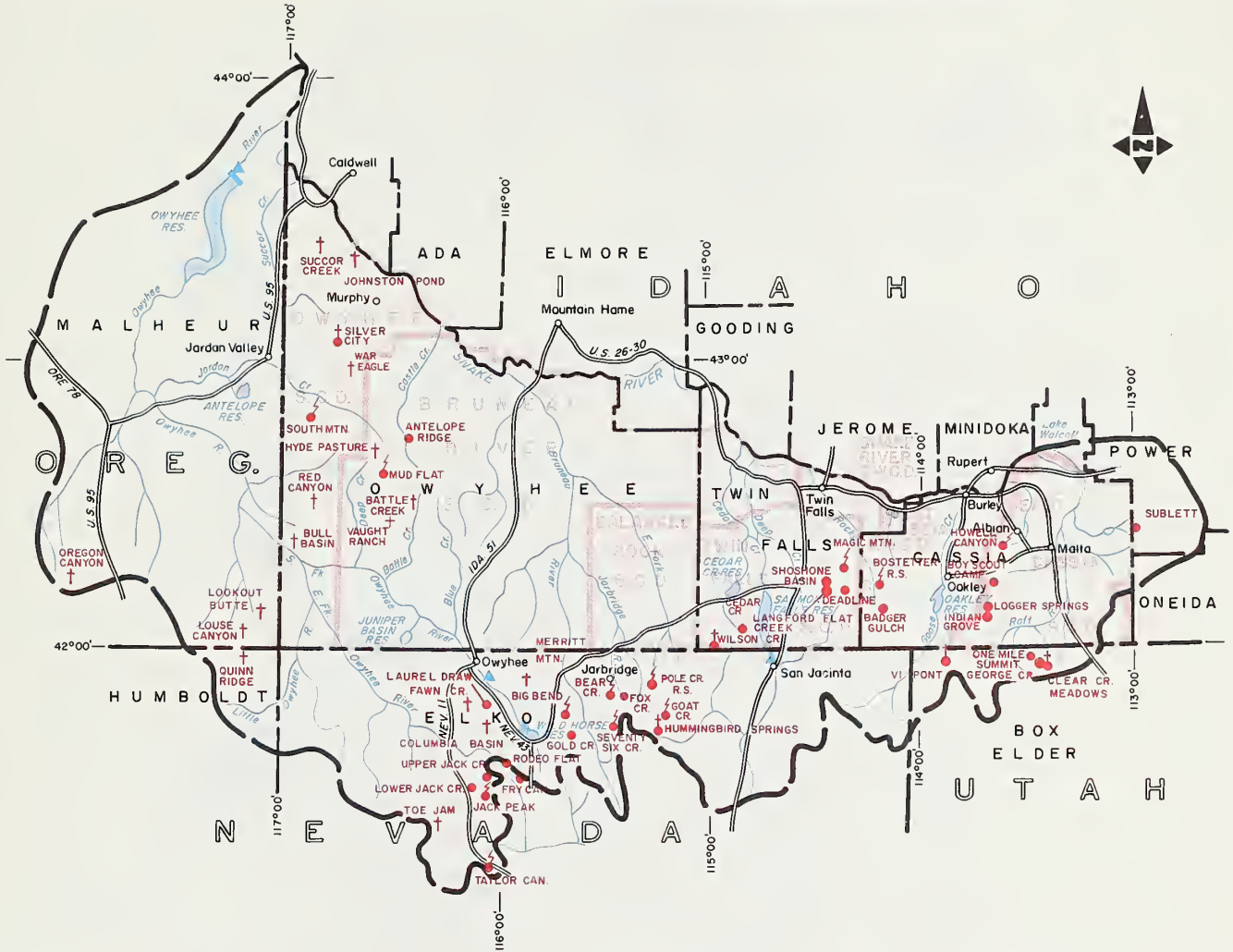
LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

MIDDLE SNAKE RIVER BASIN SOUTHSIDE

25 0 25 50 75
SCALE IN MILES



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forcast Point
- Snow Course
- Snow Course and Automated Site
- † Aerial Snow Depth Goge

WATERSHED LOCATIONS



INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN SOUTHSIDE

No.	State	Name	Sec.	Twp.	Rge.	Elevation
			Lat.	or And	Long.	
RAFT RIVER						
13G2	I	Boy Scout Camp	8	14S	24E	7740
13H2	U	Glear Creek Meadows	26	14N	14W	9420
13H5	U	George Creek	26	14N	14W	8840
13G1S	I	Howell Ganyon	2	13S	24E	7980
13G4	I	Indian Grove	14	15S	23E	7560
13G3	I	Logger Springs	2	15S	23E	8120
13H1	U	One Mile Summit	17	14N	14W	7330
12G8	I	Sublett	17	12S	30E	5950
GOOSE - TRAPPER CREEK						
14G3	I	Badger Gulch	24	15S	19E	6660
14G1S	I	Bostetter Ranger Station	35	14S	19E	7500
13H3A	U	Vi Pont	17	14N	17W	7670
SALMON FALLS CREEK						
14G5	I	Gedar Creek	26	15S	13E	6800
14G4	I	Deadline	25	14S	18E	6900
15H13S	N	Goat Creek	31	46N	60E	8880
14G08	I	Langford Flat Creek	8	15S	18E	5980
14G2S	I	Magic Mountain	25	14S	18E	6880
14G6	I	Shoshone Basin	24	14S	17E	5810
15G2	I	Wilson Creek	24	16S	12E	7500
BRUNEAU RIVER						
15H1S	N	Bear Creek	31	46N	58E	8040
15H2	N	Fox Creek	33	46N	58E	6750
15H15	N	Hummingbird Springs	12	45N	59E	8870
15H14S	N	Pole Creek Ranger Station	13	46N	59E	8330
15H3S	N	Seventy-six Creek	6	44N	58E	7100
OWYHEE RIVER						
16G6	I	Antelope Ridge	3	9S	1W	6180
16G9A	I	Battle Creek	10	11S	1E	5720
15H4S	N	Big Bend	30	45N	56E	6700
16G10A	I	Bull Basin	29	12S	5W	5460
16H6A	N	Columbia Basin	31	44N	53E	6650
16H8A	N	Fawn Creek	2	45N	52E	7000
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	32	45N	56E	6600
16G5A	I	Hyde Pasture	31	8S	2W	5760
16H4S	N	Jacks Peak	21	42N	53E	8420
16F5A	I	Johnston Pond	5	4S	4W	6700
16H5S	N	Laurel Draw	20	45N	53E	6700
17G6A	O	Lookout Butte	2	40S	47E	5650
17G4A	O	Louse Ganyon	27	40S	44E	6440
16H1M	N	Lower Jack Creek	18	42N	53E	6800
15H20A	N	Merritt Mountain	10	46N	54E	7000
16G7S	I	Mud Flat	34	9S	2W	5730
17G5A	O	Oregon Ganyon	8	40S	40E	6950
17H6A	N	Quinn Ridge	9	47N	41E	6300
16G11A	I	Red Ganyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800
16F3	I	Silver Gity	7	5S	3W	6400
16G1S	I	South Mountain	35	7S	5W	6500
16F6A	I	Succor Creek	25	3S	5W	6100
15H9S	N	Taylor Ganyon	35	39N	53E	6200
16H7A	N	Toe Jam	29	40N	50E	7700
16H2	N	Upper Jack Creek	9	42N	53E	7250
16G12A	I	Vaught Ranch	23	11S	1W	5830
16G13A	I	War Eagle	16	5S	3W	7720

LEGEND

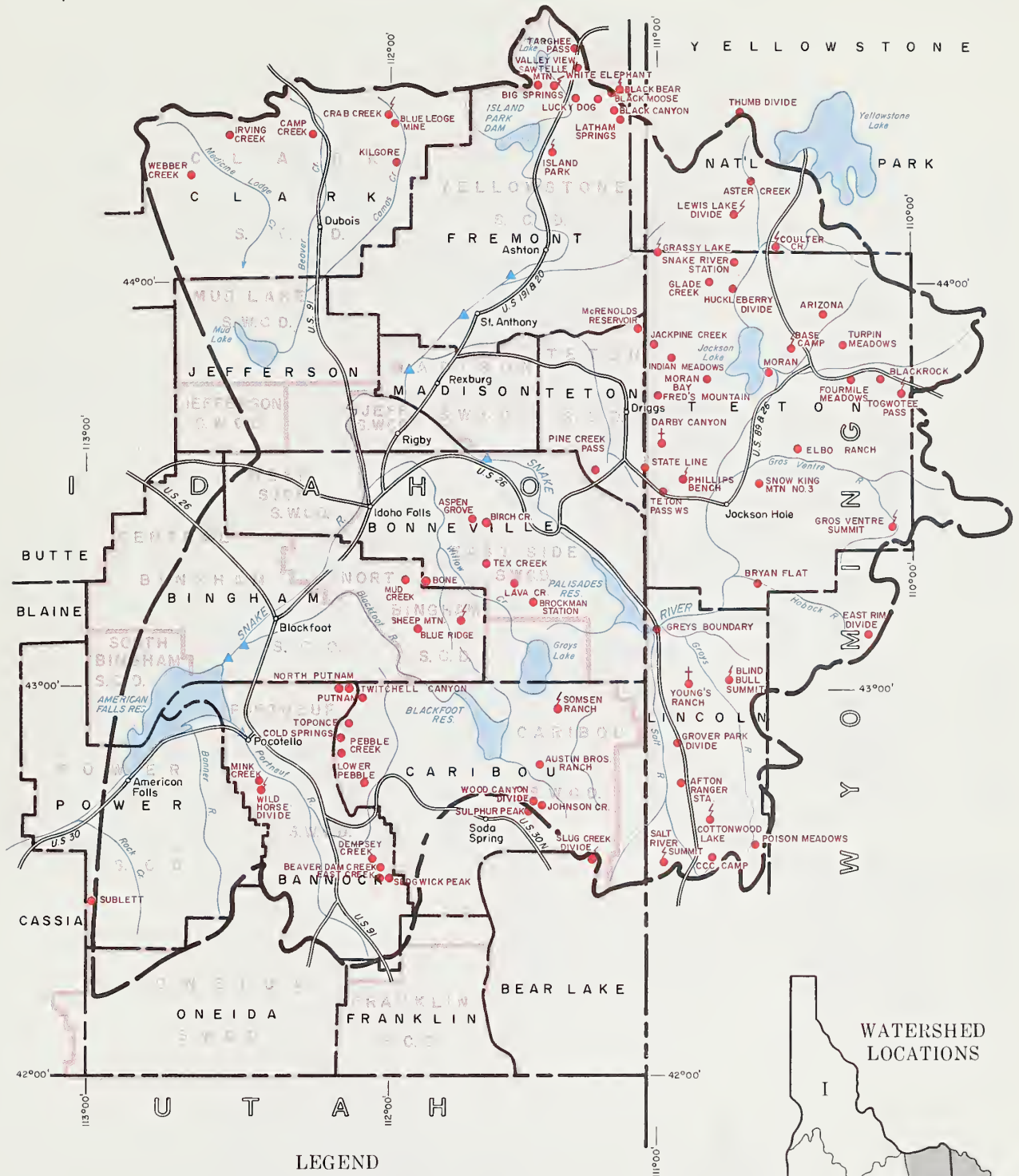
Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

UPPER SNAKE RIVER BASIN



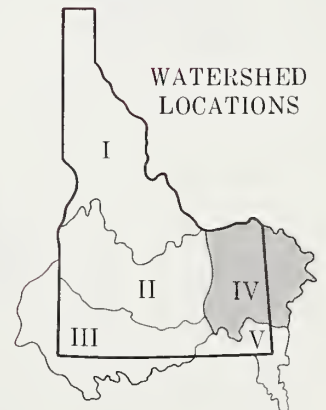
25 0 25 50
SCALE IN MILES



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- Snow Course
- Snow Course and Automated Site
- † Aerial Snow Depth Gage

WATERSHED LOCATIONS



INDEX to SNOW COURSES

UPPER SNAKE RIVER BASIN

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
SNAKE RIVER-WYOMING						
10G4	Wy	Afton Ranger Station	30	32N	118W	6240
10F1	Wy	Arizona	3	46N	115W	6820
10E8	Wy	Aster Creek	44°17'		110°38'	7750
10F2S	Wy	Base Camp	20	46N	113W	7030
10F7S	Wy	Blackrock	4	44N	111W	8900
10G2S	Wy	Blind Bull	6	34N	115W	8650
10F14	Wy	Bryan Flat	9	38N	115W	6420
10G7	Wy	CCC Camp	9	29N	118W	7000
10G5S	Wy	Cottonwood Lake	25	31N	118W	7600
10E10S	Wy	Coulter Creek	44°10'		110°33'	7020
10F17	Wy	East Rim Divide	32	37N	111W	7930
10F28	Wy	Elbo Ranch	25	43N	115W	7100
10F6	Wy	Four Mile Meadows	35	45N	112W	7860
10E13	Wy	Glade Creek	12	48N	116W	7040
10F18	Wy	Greys Boundary	33	37N	118W	5720
10F19S	Wy	Gros Ventre Summit	36	40N	111W	8750
10G3	Wy	Grover Park Divide	27	33N	118W	7000
10E14	Wy	Huckleberry Divide	32	48N	115W	7300
10E9S	Wy	Lewis Lake Divide	44°12'		110°40'	7850
10F4	Wy	Moran	19	45N	114W	6750
10F3	Wy	Moran Bay	14	45N	116W	6810
10G6	Wy	Poison Meadows	29	30N	116W	8500
10G8S	Wy	Salt River Summit	32	29N	118W	7700
10E12	Wy	Snake River Station	9	48N	115W	6920
10F20	Wy	Snow King Mountain #3	4	40N	116W	7660
10E7	Wy	Thumb Divide	44°22'		110°34'	7980
10F9S	Wy	Togwotee Pass	28	44N	110W	9580
10F5	Wy	Turpin Meadows	14	45N	112W	6900
10G1A	Wy	Young's Ranch	26	34N	116W	6650

HENRY'S FORK RIVER

11E9	I	Big Springs	4	13N	44E	6400
11E35S	M	Black Bear	27	15S	5E	7950
11E18	I	Black Canyon	11	13N	45E	7960
11E19	I	Black Moose	33	14N	45E	8160
110E15S	Wy	Grassy Lake	18	48N	116W	7265
11E10S	I	Island Park	28	13N	43E	6290
11E16	I	Latham Springs	9	13N	45E	7630
11E14	I	Lucky Dog	2	13N	44E	6860
11E32	I	Sawtell Mountain	7	14N	43E	8720
11E34	I	Targhee Pass	32	16N	44E	6980
11E8	I	Valley View	12	15N	43E	6680
11E36S	I	White Elephant	17	14N	43E	7710

TETON RIVER

10F21A	Wy	Darby Canyon	28	43N	118W	8250
10F22	Wy	Freds Mountain	12	44N	118W	8000
10F25	Wy	Indian Meadows	33	46N	117W	8240
10F26	Wy	Jackpine Creek	15	46N	118W	7350
11F12	I	McRenolds Reservoir	5	7N	46E	6720
10F23S	Wy	Phillips Bench	43°31'		110°55'	8200
11F2	I	Pine Creek Pass	24	3N	44E	6810
11F1	I	State Line	32	3N	46E	6660
10F24	Wy	Teton W. S.	43°30'		110°59'	7740

No.	State	Name	Sec. Lat.	Twp. or And	Rge. Long.	Elev
CAMAS-BEAVER CREEK						
11E11	I	Blue Ledge Mine	21	13N	38E	6900
12E3	I	Camp Creek	21	13N	36E	6580
11E17S	I	Crab Creek	21	13N	38E	6860
11E12	I	Kilgore	6	12N	39E	6320

MEDICINE LODGE CREEK

12E4	I	Irving Creek	8	13N	33E	7280
12E5	I	Webber Creek	23	12N	32E	6700

WILLOW CREEK

11F10	I	Aspen Grove	36	2N	41E	6500
11F3	I	Birch Creek	36	2N	41E	6800
11F8	I	Bone	29	1S	40E	6200
11F16	I	Brockman Station	19	2S	43E	6430
11F15	I	Lava Creek	27	1S	42E	7350
11F14	I	Mud Creek	4	2S	39E	7100
11F11S	I	Sheep Mountain	30	2S	41E	6570
11F5	I	Tex Creek	36	1N	41E	6650

BLACKFOOT RIVER

11G3	I	Austin Brothers Ranch	28	7S	43E	6400
11F17	I	Blue Ridge	35	2S	39E	6780
11G22	I	Johnson Creek	4	9S	43E	6730
11G5S	I	Slug Creek Divide	15	10S	44E	7225
11G1S	I	Somsen Ranch	25	5S	43E	6800
11G19	I	Sulphur Peak	8	9S	43E	7070
11G23	I	Wood Canyon Divide	5	9S	43E	7450

FORT PORTNEUF RIVER

12G7	I	Beaverdam Creek	22	10S	38E	6120
12G16	I	Cold Springs	15	7S	37E	7000
12G5	I	Dempsey Creek	18	10S	38E	6100
11G24	I	East Creek	26	10S	38E	7000
12G6	I	Lower Pebble	7	8S	38E	5780
12G1	I	Mink Creek	33	7S	34E	6410
12G20	I	North Putnam	29	5S	37E	7240
12G2	I	Pebble Creek	35	7S	37E	6400
12G14	I	Putnam	2	6S	37E	7220
11G17	I	Sedgwick Peak	30	10S	39E	7850
12G15	I	Toponce	23	6S	37E	6160
12G19	I	Twitchell Canyon	21	5S	37E	6300
12G17S	I	Wildhorse Divide	4	8S	34E	6490

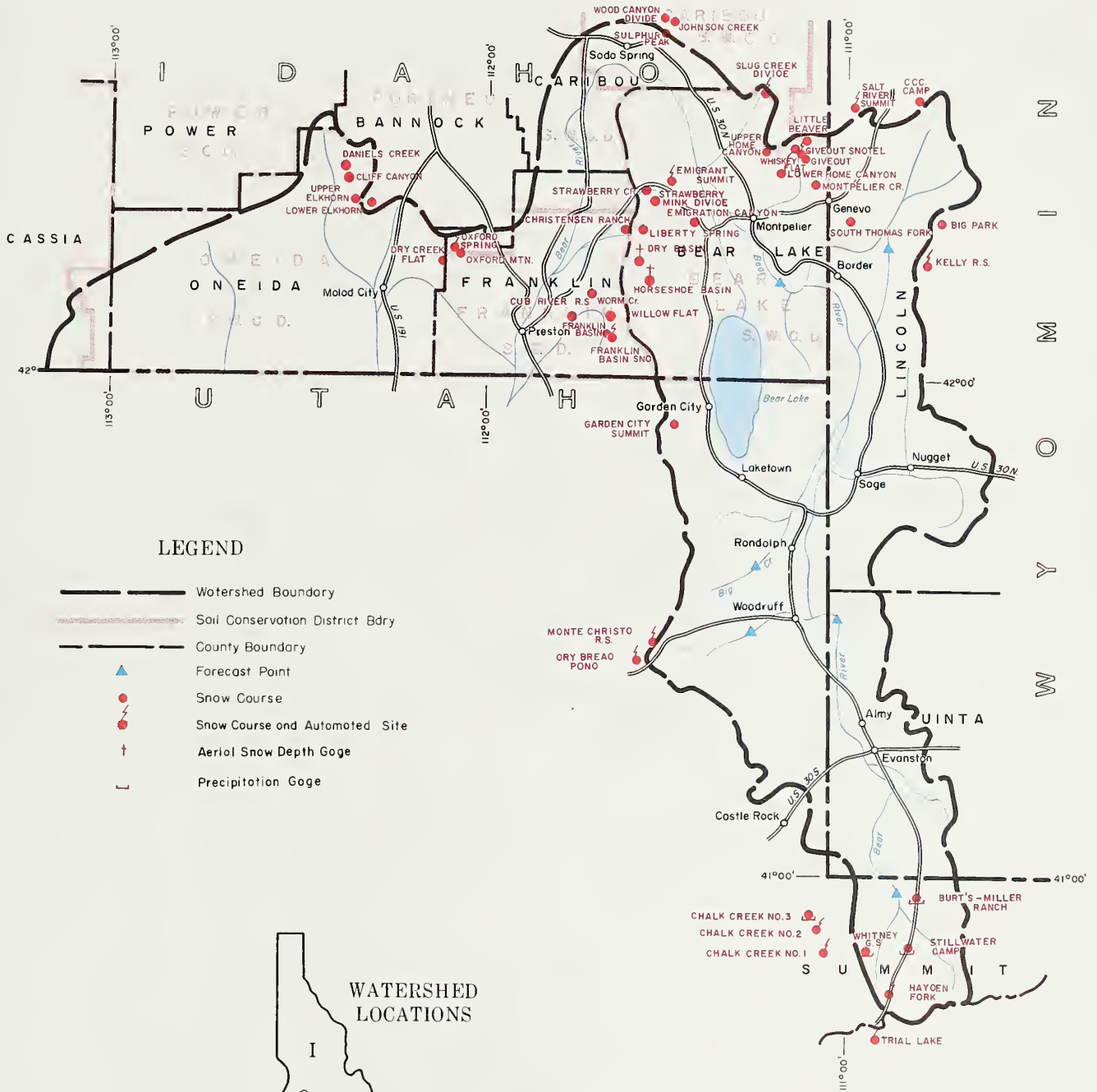
LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

GREAT BASIN

25 0 25 50
SCALE IN MILES



INDEX to SNOW COURSES

GREAT BASIN

No.	State	Name	Sec.	Twp.	Rge.	Elevation
			Lat.	or And	Long.	
BEAR RIVER						
10G11	Wy	Big Park	7	27N	117W	8620
11H13S	U	Dry Bread Pond	19	8N	4E	8350
11G7	I	Emigration Canyon	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burts-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	25	1N	9E	9400
10G12S	Wy	Kelly Ranger Station	1	26N	118W	8200
11H12P	U	Monte Cristo R. S.	4	8N	4E	8960
10G19	Wy	South Thomas Fork	27	27N	119W	7840
10J17P	U	Stillwater Camp	32	2N	10E	8550
10J28P	U	Whitney G. S.	4	1N	9E	9300

MONTPELIER CREEK

11G16	I	Giveout	2	12S	45E	6840
11G25S	I	Giveout Snotel	2	12S	45E	6930
11G20	I	Little Beaver	27	11S	45E	6970
11G27	I	Lower Home Canyon	17	12S	45E	7640
11G18	I	Montpelier Creek	14	12S	45E	6540
11G26	I	Upper Home Canyon	31	11S	45E	8560
11G21	I	Whiskey Flat	26	11S	45E	6960

MINK CREEK

11G11	I	Christensen Ranch	27	13S	41E	5560
11G14A	I	Dry Basin	30	13S	42E	7820
11G6S	I	Emigrant Summit	21	12S	42E	7390
11G15A	I	Horseshoe Basin	31	13S	42E	8000
11G13	I	Liberty Spring	7	13S	42E	8600
11G9	I	Strawberry Creek	9	13S	41E	5820
11G10	I	Strawberry Mink Divide	14	13S	41E	6720

CUB RIVER

11G12	I	Cub River Ranger Station	9	15S	41E	5450
11G8	I	Franklin Basin	1	16S	41E	8040
11G2S	I	Franklin Basin Sno	7	16S	42E	8170
11G4	I	Willow Flat	11	15S	41E	6070
11G28	I	Worm Creek	28	14S	41E	6620

MALAD RIVER

12G13	I	Cliff Canyon	13	12S	35E	7200
12G12	I	Daniels Creek	11	12S	35E	6270
12G4	I	Dry Creek Flat	33	13S	37E	6360
12G11	I	Lower Elkhorn	30	12S	36E	6960
12G3	I	Oxford Mountain	27	13S	37E	6800
12G18S	I	Oxford Spring	27	13S	37E	6740
12G10	I	Upper Elkhorn	25	12S	35E	7140

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage
10J7P	Precipitation gage

